



getting started

hp workstation xw4000
hp workstation xw6000

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This book will help you set up factory-provided software. Basic troubleshooting is also provided should you have problems during initial startup.

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Software Setup

Installing the Operating System



CAUTION: Do not add optional hardware devices or third-party devices to your computer until the operating system is successfully installed. Doing so may cause errors and may prevent the operating system from installing properly.

The first time you turn on your computer, you may be prompted to select a language for your operating system (OS) and then you will be asked to install your OS. You must install the OS completely. Read and follow the instructions on the screen to complete the installation of the OS.

If electing to use an OS different than what was shipped with your system, refer to the following support Web site location for additional support that may be available:

<http://www.compaq.com/support/workstations/index.html>



CAUTION: During the OS installation process, do not turn off your computer unless you are directed to do so.

HP is committed to designing products, services, and programs with improved usability and accessibility for all customers. HP products with Microsoft Windows XP preinstalled, or that are XP Ready, are designed for accessibility. These products are tested with industry-leading Assistive Technology products to ensure equal access—anytime, anywhere... to anyone.

File System Format



Depending on your system, you may be prompted to select a file system format during the initial setup of your system.

Hard drives can be configured in three basic formats: FAT16 and FAT32 (for HDD partitions less than 8 GB), or NTFS (for HDD partitions up to and greater than 8 GB), with variances of each, depending on the operating system and hard drive support. To check the file system format assigned to your hard drive (factory settings), open My Computer, right-click on Local Disk (C:), then select Properties.



Microsoft Windows 98 supports the FAT32 file system format only.

Converting to NTFS

NTFS offers the following features:

- Transaction logs
- Access control

Transaction Logs

Transaction logs help recover from disk failures.

Access Control

Access Control allows you to set permissions to control access to your files and directories.

Depending on which file system format your hard drive is using, the **NTFS Convert** utility may be available for you to convert part or all of the drive partition to NTFS format.



CAUTION: You may experience data loss if you attempt to convert your drive to NTFS using the methods described in this section. Before converting your drive, make a backup copy of all data stored on your hard drive.

NTFS Convert Desktop Icon

Double-click the **NTFS Convert** icon located on the desktop. Read and follow the instructions that appear on the screen to change the drive partitioning. This feature is available on select models only.

Installing or Upgrading Device Drivers

To install optional hardware devices after the OS installation is complete, you must install the device drivers for the devices you are installing.

If prompted for the I386 directory, replace the path specification with **C:\I386**, or use the **Browse** button of the dialog box to locate the I386 folder. This action points the OS to the appropriate drivers.



You can obtain the latest support software, including support software for your OS from:

<http://www.compaq.com/support>

You can also obtain the latest support software through a subscription to the Compaq Support CD Kit using the Support Software Management order form available at the following Web site:

<http://www.compaq.com/support/files/workstations/us/purchase.html>

This site also provides information on how to purchase a subscription.



If your system has an optical RW drive, you must install the appropriate application to be able to write to the drive. To install the drivers, double-click the **Setup Software** icon on the desktop or the application launcher and select the Easy CD Creator and Direct CD option when prompted.

Customizing the Monitor Display

To change the default configuration settings for your monitor display, such as the screen resolution, color settings, and font sizes, double-click the **Display** icon in the Control Panel. For more information about your display driver and other utilities that you can use with your graphics controller, refer to your graphics controller documentation.



You can obtain the latest graphics drivers from <http://www.compaq.com/support>.

Turning Off Your Computer

To properly turn off your computer, click **Shut Down** on the Start menu. In Windows XP, select **Turn Off Computer** on the Start menu. The computer will automatically shut down.

In Windows NT Workstation 4.0, the power button always functions as a power switch. However, in the default configuration of Windows 98, Windows 2000 Professional, Windows XP Professional or Windows XP Home, pressing the power button does not turn off the power, but causes the computer to enter a low-power state. This default configuration allows you to quickly power down, without closing applications, and to quickly return to the same operational state without any data loss.



To manually force the computer into an OFF state, press and hold the power button for four seconds.



CAUTION: Manually forcing the computer off can cause loss of data.



To reconfigure the power button to work in On/Off mode for Windows 98, Windows 2000 Professional, Windows XP Professional, or Windows XP Home, refer to the *Desktop Management Guide* for detailed instructions.

Protecting Your Software

To protect your software from loss or damage, keep a backup copy of all system software, applications, and related files stored on your hard drive. Refer to your OS or backup utility documentation for instructions on making backup copies of your data files.

Restoring Your Software

Restore the original operating system and factory-installed software by using the *Compaq Restore* CD or *Restore Plus!* CD, and any other CDs that came with the computer. Carefully read and follow the instructions for the restore solution that came with the computer.

For questions about or problems with this CD, please contact customer service.

Using the Documentation Library CD

Refer to the *Documentation Library* CD for additional product documentation.



If you do not have a CD-ROM drive, you may download the product documentation from <http://www.compaq.com/support>.

1. Insert the compact disc into the CD-ROM drive. There may be a slight delay while the software checks the Windows Regional Settings. If a recent version of Adobe Acrobat or Acrobat Reader is not found on the computer, it will be installed automatically from the CD. Read and follow the prompts to complete the installation.

The menu and books are displayed in the language chosen during initial system setup or specified later in your Windows Regional Settings. If the Regional Settings do not match one of the languages supported on the CD, the menu and books are displayed in English.

2. Click the title of the book you want to read.

If there is no CD-ROM drive activity for two minutes or more, it may be because Autorun is not enabled on the system. To run the *Documentation Library* CD if it does not run automatically:

1. Click **Start > Run**.

2. Type:

X:\DocLib.exe

(where **X** is the drive letter designator for the CD-ROM drive)

3. Click **OK**.

Regulatory Information

These are Class B digital devices, pursuant to Part 15 of the FCC Rules. Refer to the *Safety & Regulatory Information* guide on the *Documentation Library* CD for Class B information.

Getting Help

Additional help and other information can be obtained through Technical Support information at <http://www.compaq.com> or in the warranty information included with your computer.

Basic Troubleshooting

Overview

This chapter is intended for basic troubleshooting only. A comprehensive *Troubleshooting Guide* is available on the *Documentation Library* CD and at <http://www.compaq.com/support>.

You may elect to purchase the *Quick Troubleshooting Guide* (part number 120205-002) that contains easy to follow flow charts that can lead you through the debug process. This guide was written for authorized service providers and contains steps that may be beyond the technical capabilities of some users. Improperly performing some processes identified in the guide may damage the computer and/or void your warranty. If you are unsure of your ability to perform the task, or if you are concerned about voiding your product warranty, contact your local authorized sales or service representative before undertaking the recommended corrective action.

If electing to use an OS different than what was shipped with your system, refer to <http://www.compaq.com/support/workstations/index.html> for additional support that may be available.

See “Restoring Your Software” in Chapter 1 for information regarding software problems.

Helpful Hints

If you encounter some minor problem with your computer, monitor, or software, refer to the following list of general suggestions before taking further action:

- Check that the computer and monitor are plugged into a working electrical outlet.

- Check to see that the computer is turned on and the green power light is on.
- Check to see that the monitor is turned on and the green monitor light is on.
- Turn up the brightness and contrast controls of the monitor if the monitor is dim.
- Press and hold any key. If the system beeps, then your keyboard is operating correctly.
- Check all cable connections for loose connections or incorrect connections.
- Reconfigure your computer after installing a non–plug and play expansion board or other option. See “Solving Hardware Installation Problems” for instructions.
- Be sure that all the needed device drivers have been installed. For example, if you have connected a printer, you need to install a printer driver.
- Remove all diskettes from your system before turning it on.
- If you have installed an operating system other than the factory-installed operating system, check to be sure that it is supported on your system.
- If your system has multiple video sources (embedded, PCI, or AGP adapters) installed (embedded video on select models only) and a single monitor, the monitor must be plugged into the monitor connector on the source selected as the primary VGA adapter. During boot, the other monitor connectors are disabled and if the monitor is connected into these ports, the monitor will not function. You can select which source will be the default VGA source in Computer (F10) Setup.



CAUTION: When the computer is plugged into an AC power source, there is always voltage applied to the system board. You must disconnect the power cord from the power source before opening the computer to prevent system board or component damage.


Solving General Problems

You may be able to easily resolve the minor problems described in this section. If a problem persists and you are unable to resolve it yourself or if you feel uncomfortable about performing the operation, contact an authorized dealer or reseller.

Solving General Problems

Problem	Cause	Solution
Computer will not turn on.	Computer is not connected to an external power source.	Connect to an external power source.
	Cables to the external power source are unplugged.	Ensure that cables connecting the computer to the external power source are plugged in properly and the wall outlet is active.
	A defective PCI card has been installed.	Remove any expansion board that was just installed.
	Drive power, data, or power supply cables may not be properly connected.	Reseat drive power, data, and power supply cables.
	The unit temperature was exceeded. The fan may be blocked.	<ol style="list-style-type: none"> 1. Unit is in an exceedingly hot environment. Let it cool down. 2. Ensure that computer air vents are not blocked and internal fan is running. Contact an authorized reseller or service provider.
	Power line selector switch on rear of computer chassis is not switched to correct line voltage (115V or 230V) (some models).	Select the proper AC voltage using the slide switch.


Solving General Problems *(Continued)*

Problem	Cause	Solution
Computer appears locked up and will not turn off when the power button is pressed.	Software control of the power switch is not functional.	Press and hold the power button for at least four seconds until the computer turns off.
Computer will not respond to USB keyboard or mouse.	Computer is in Stand By mode.	Press the power button to resume from Stand By mode.
	 CAUTION: When attempting to resume from Stand By mode, do not hold down the power button for more than four seconds. Otherwise, Stand By mode is lost, and you will lose your data.	
Computer powered off automatically and the Power LED is: 1. Flashing Red or Yellow four times per second, OR 2. Flashing Red or Yellow two times one second apart, followed by a two second pause, OR 3. Not flashing.	The unit temperature was exceeded. The fan may be blocked or not turning, OR the heatsink is not properly attached to the processor.	<ol style="list-style-type: none">1. Unit is in an exceedingly hot environment. Let it cool down.2. Ensure that computer air vents are not blocked and internal fans are running (i.e. power supply fan, chassis fan, and/or processor fan).3. Ensure that the heatsink is properly seated.4. Contact an authorized reseller or service provider.
	The unit temperature was exceeded because the computer was functioning with the cover or access panel removed.	Replace cover or access panel, and let the computer cool down before attempting to turn on power to the computer.

Solving General Problems (Continued)

Problem	Cause	Solution
Computer date and time display is incorrect.	RTC (real-time clock) battery may need to be replaced. Battery life is approximately 3–5 years.	First, reset the date and time under Control Panel (Computer Setup) can also be used to update the RTC date and time). If the problem persists, replace the RTC battery. Refer to the <i>Hardware Reference Guide</i> for instructions on installing a new battery, or contact an authorized dealer or reseller for RTC battery replacement.
Computer appears to pause periodically.	Network driver is loaded and no network connection is established.	Establish a network connection, or use Computer Setup or Windows Device Manager to disable the network controller.
Cannot remove computer cover or access panel.	Smart Cover Lock, featured on some computers, is locked.	Unlock the Smart Cover Lock using Computer Setup (F10 Setup). The Smart Cover FailSafe Key, a device for manually disabling the Smart Cover Lock, is available from HP. You will need the FailSafe Key in case of a forgotten password, power loss, or computer malfunction.
Poor performance is experienced.	Processor is hot.	<ol style="list-style-type: none"> 1. Make sure the airflow to the computer is not blocked. 2. Make sure the fans are connected and working properly (some fans only operate when needed). 3. Make sure the processor heatsink is installed properly.
Cursor will not move using the arrow keys on the keypad.	The Num Lock key may be on.	Press the Num Lock key. The Num Lock light should not be on if you want to use the arrow keys.

Solving General Problems *(Continued)*

Problem	Cause	Solution
Blank monitor screen.	Monitor is not turned on and the monitor light is not on.	Turn on the monitor and check that the monitor light is on.
	The cable connections are not correct.	Check the monitor cable connection from the monitor to the computer to the appropriate connector, and to the electrical outlet. If you have an AGP card installed, ensure that the monitor is connected to the AGP card.
	Computer is in Stand By mode.	Press the power button to resume from Stand By mode.
 CAUTION: When attempting to resume from Stand By mode, do not hold down the power button for more than four seconds. Otherwise, Stand By mode is lost, and you will lose your data.		
	System ROM is bad; system is running in Failsafe Boot Block mode (indicated by one long beep and three short beeps).	Reflash the ROM using a ROMPaq diskette. See the “Failsafe Boot Block ROM” section of the <i>Desktop Management Guide</i> for more information.
	The energy saver feature has been enabled.	Press any key or click the mouse button and, if set, type your password.
	The RGB (Red, Green, Blue) input switch on the monitor is incorrectly set.	Set the monitor’s RGB input switch to 75 ohms and, if there is a sync switch, set it to external.

Solving General Problems *(Continued)*

Problem	Cause	Solution
Blank monitor screen. <i>(continued)</i>	You are using a fixed-sync monitor and it will not sync at the resolution chosen.	Be sure that the monitor can accept the same sweep rate as the resolution chosen.
	The VGA/BNC selector switch is not properly set.	Set the selector switch to agree with the cable connection.
SCSI hard drives are not recognized after being installed when running under Windows NT.	SCSI drivers were not installed on the system prior to the Windows NT installation.	Install the SCSI drivers on your system first, then install Windows NT. To download SCSI drivers for your system, visit http://www.compaq.com/support . For information on installing SCSI drivers, see the <i>Troubleshooting Guide</i> Appendix E, "Installing SCSI Drivers for Windows NT Installation."

Solving Hardware Installation Problems

You may need to reconfigure the computer when you add or remove hardware, such as an additional diskette drive. If you install a plug and play device, Windows 98, Windows 2000, Windows XP Professional, and Windows XP Home automatically recognizes the device and configures the computer. If you install a non-plug and play device, you must reconfigure the computer after completing installation of the new hardware. In Windows 98, Windows 2000, Windows XP Professional, and Windows XP Home, select the **Add New Hardware** icon in the Control Panel and follow the instructions that appear on the screen. To reconfigure the computer in Windows NT 4.0 after installing new hardware, use the utility provided with the hardware.

Solving Hardware Installation Problems

Problem	Cause	Solution
A new device is not recognized as part of the system.	Cable(s) of new external device are loose or power cables are unplugged.	Ensure that all cables are properly and securely connected and that pins in the cable or connector are not bent down.
	Power switch of new external device is not turned on.	Turn off the computer, turn on the external device, then turn on the computer to integrate the device with the computer system.
	When the system advised you of changes to the configuration, you did not accept them.	Reboot the computer and follow the instructions for accepting the changes.

Diagnostic Keyboard LEDs, Front Panel LEDs, and Audible Codes

The following table describes the keyboard and front panel LED codes as well as the audible codes that may occur during Power On Self Test (POST) that do not necessarily have an error code or text message associated with them. Refer to the *Troubleshooting Guide* on the *Documentation Library* CD for more information.




If your system is equipped with a Universal Serial Bus (USB) keyboard, you may hear the beep sequences for some of the keyboard light error codes, but you may not see the flashing keyboard lights.

Diagnostic Keyboard LEDs, Front Panel LEDs, and Audible Codes			
Activity	Beeps	Probable Cause	Recommended Action
Num Lock , Caps Lock , and Scroll Lock LEDs flash on and off two times.	1L, 3S*	System ROM is bad; system is running in Failsafe Boot Block mode.	Reflash the ROM using a ROMPaq diskette. See the "Failsafe Boot Block ROM" section of the <i>Desktop Management Guide</i> .
Flashing Caps Lock LED on Keyboard.	1L, 2S*	Graphics controller not present or incorrectly initialized.	<ol style="list-style-type: none">1. Clear CMOS.2. If graphics card has been added, remove and reseal.3. Reseat riser board if applicable.

*L = Long, S = Short

Diagnostic Keyboard LEDs, Front Panel LEDs, and Audible Codes

Activity	Beeps	Probable Cause	Recommended Action
Flashing Num Lock LED on keyboard (on select models).	1S, 2L*	System memory not present.	<ol style="list-style-type: none"> 1. Check memory module (see the relevant section of the <i>Hardware Reference Guide</i>). 2. Remove and reseal memory module. 3. See the "Solving Memory Problems" section of the <i>Troubleshooting Guide</i>.
<p> CAUTION: Some models support ECC memory and non-ECC memory. Other models support only non-ECC memory. For those systems that do support ECC memory, HP does not support mixing ECC and non-ECC memory. In addition, the system will not boot the operating system.</p>			
Num Lock LED ON (keyboard).	None	Boot Block Recovery Failed. ROMPaq diskette not present, is bad, or drive is not ready.	Reflash the ROM using a ROMPaq diskette. See the "Failsafe Boot Block ROM" section of the <i>Desktop Management Guide</i> .
Flashing Scroll Lock LED on keyboard (on select models).	2L, 1S*	System board hardware failure (prior to graphics).	Replace system board.
Green Power LED On.	None	Computer on.	None
Green Power LED flashes every two seconds.	None	Computer in Suspend to RAM mode (select models only) or normal Suspend mode.	None
Power LED is clear.	None	Computer in Suspend to Disk mode (if applicable) or Power is off.	None

*L = Long, S = Short

Diagnostic Keyboard LEDs, Front Panel LEDs, and Audible Codes

Activity	Beeps	Probable Cause	Recommended Action
Red or Yellow Power LED flashes every 2 seconds (on select models).	None	Power supply overloaded.	<ol style="list-style-type: none"> 1. Push in power button. LED should be green. 2. Remove all AC power from computer, wait 30 seconds, then apply power. 3. Remove load from power supply by removing options one at a time until computer runs. 4. Check for damage to system board. 5. Replace system board. 6. Replace power supply.
Flashing Power and Hard Drive Green LEDs.	None	Unseated riser board.	<ol style="list-style-type: none"> 1. Remove riser board. 2. Wipe connector. 3. Reinstall riser board (see the <i>Hardware Reference Guide</i> for directions on removing the riser board).
Red Power LED flashes every second (on select models).	None	ROM error.	Reflash the ROM using a ROMPaq diskette. See the "ROM Flash" section of the <i>Desktop Management Guide</i> .
Red or Yellow Power LED On.	None	Processor unseated.	Reseat processor in system board.

Diagnostic Keyboard LEDs, Front Panel LEDs, and Audible Codes

Activity	Beeps	Probable Cause	Recommended Action
Red or Yellow Power LED is: 1. Flashing four times per second, OR 2. Flashing two times one second apart, followed by a two second pause, OR 3. Not flashing.	None	Computer overheated.	1. Install computer cover or access panel if necessary. 2. Ensure that computer air vents are not blocked and internal fan is running.

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